



Norman H. Bangerter
Governor
Kenneth L. Alkema
Executive Director
Don A. Ostler, P.E.
Director

State of Utah
DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF WATER QUALITY

288 North 1460 West
Salt Lake City, Utah
(801) 538-6146
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November 21, 1991

Reply to: State of Utah
Division of Water Quality
Department of Environmental Quality
Salt Lake City, Utah 84114-4870

Wayne - route to file
m/035/009

Mr. R.J. Ramsey, Manager
Barney's Canyon Mine
P.O. Box 311
Bingham Canyon, Utah 84006-0311

RE: Measurable Cyanide Concentration in Pit
Water from Barney's Canyon Mine

Dear Mr. Ramsey:

The Division of Water Quality has reviewed the data you submitted on September 24, 1991, describing cyanide (CN) concentrations ranging from 0.024 to 0.51 mg/l in water from the mine pits. These concentrations are unusual since the mine pits are about one mile upgradient the heap leach pads, where CN is used. Our inquiries to other agencies as to possible sources of the CN has produced no leads or possible clues. The idea offered by Barney's Canyon that the cyanide is produced during the blasting process with ammonia nitrate and diesel fuel is worth further investigation.

Because of the dissolved solids concentration of the mine water, and the high concentration of CN, mine pit water should not be discharged from Company property or into washes or stream valleys below the mine pit. Steve McNeal of our office should be contacted in regards to UPDES requirements before use of this water at the concentrator. In the interim we request Barney's Canyon to further investigate the origin of the CN in the mine water and to monitor the concentration twice weekly. The results of the investigation along with the water quality analyses should be submitted to this office within six months.

If you have questions, call Mack Croft or Steve McNeal at 538-6146. Thank you for your help.

Sincerely,

Utah Water Quality Board

Don A. Ostler, P.E.
Executive Secretary

DAO:MGC:mhf

cc: Salt Lake City/County Health Department
Division of Oil, Gas & Mining

Q:BARCAN.LTR

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OIL GAS & MINING